

ABSTRACT OF THE DISCLOSURE

Vacuum pumping apparatus includes a scroll set having an inlet and an outlet, the scroll set including a stationary scroll element and an orbiting scroll element, and a drive mechanism for producing orbiting motion of the orbiting scroll element relative to the stationary scroll element. The vacuum pumping apparatus further includes a bellows assembly coupled between a first stationary component of the apparatus and the orbiting scroll element so as to isolate a first volume inside the bellows assembly and a second volume outside the bellows assembly. One end of the bellows assembly is free to rotate during motion of the orbiting scroll element. The apparatus also includes a synchronization mechanism coupled between the orbiting scroll element and a second stationary component of the apparatus. The synchronization mechanism is located within the first volume.